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EXAMINER

NGUYEN, MADELEINE ANH VINH

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/611,421	Applicant(s) BOCHKAREV, SERAFIM	
	Examiner Madeleine AV Nguyen	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 3-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuwata et al (Publication No. US 2006/0203298) in view of Suzuki et al (US Patent NO. 5,982,379).

Concerning claim 1, Kuwata et al discloses a method of adjusting tonal characteristics of an image for a printer, comprising the steps of preparing a color correction scheme using a color gamma curve varying in accordance with variable values comprising locations of first and second internal points (minimum and maximum points of the gamma curve) on the color gamma curve and a gamma coefficient (γ value), (Figs. 7, 20, 26, 27); receiving the variable values (Figs. 7, 9, 10); and adjusting the tonal characteristics of the image by reflecting the input variable values in the color correction scheme (Fig. 26; Abstract; paragraphs 0089-0091, 0130-0133, 0158-0167, 0196, 0233-0235, 0245, 0248-0249).

Kuwata does not directly teach that the first and second internal point and the gamma coefficient are input from a user via a graphical user interface. In the same field of endeavor, Suzuki discloses a system (Fig.1) that allow the user to interactively edit each of color components of a given color system comprising a tone correction unit 30, a gamma correction curve generation unit 120, an external input interface unit 130, a display unit 111 for displaying the gamma correction curve as well as an input set key unit 112 for specifying or selecting a certain set of parameters or information for the above described correction curve. Based upon the selected information, the gamma correction curve generation unit 120 generates a gamma correction curve and the tone correction units 30 generates the correction data based upon the gamma correction curve. The user can input parameters through the external input interface unit 130 which are sent to the gamma correction curve generation unit 120. For instance, the user can input a specified input and output range (between 0 and 1) and a predetermined number of approximation control points for each of the color components in a coordinate system. Based on the input and output ranges (first and second internal points) and the specified approximation points, a correction gamma curve is generated by a predetermined equation for each of the color components (col. 5, line 26 – col. 6, line 44). In addition, Suzuki further teaches the well known in the prior art of a correction curve generated by a function whose input and output values had predetermined ranges (entered by a user ranging between 0 and 1) and the selected γ constant (col. 1, lines 36-52). It would have been obvious to one skilled in the art at the time the invention was made to modify the system Kuwata comprising a user interface for inputting first and second internal points on the color gamma curve and the gamma coefficient since Kuwata also teaches a display with a user interface for inputting the first and second internal points on

the gamma curve (minimum and maximum values of the curve) and a gamma coefficient (γ) as illustrated in Fig.20 (paragraphs 0159-0164) while Fig.7 shows a display window for the user to specify a processing object area and a processing item (paragraph 0131-0134).

Concerning claim 7, Kuwata in view of Suzuki et al discloses a computer readable recording medium on which a computer readable program adjusts tonal characteristic of an image comprising the steps as discussed in claim 1 above.

Concerning claims 3-6, 8, Kuwata et al in view of Suzuki et al discloses the method of claims 1 and 7, wherein the first internal point is located in a position that is lower and to a left of the second internal point (Fig.20), and the first and second internal points are programmed where the first internal point moves along the color gamma curve from left to right and from bottom to top and the second internal point moves along the color gamma curve from right to left and from top to bottom (Figs. 20, 27), (claims 3 and 8); the variable values comprise information of spline correction of the color gamma curve (paragraph 0233), (claim 4); wherein the storage unit stores the color correction scheme programmed as one of a printer driver and firmware of the printer (21b), (claim 5); the variable input unit receives the variable values via one of a graphic user interface of the printer driver and a user interface of the printer (Figs.2, 7), (claim 6).

2. Claims 2, 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuwata (Publication No. US 2006/0203298) in view of Suzuki et al (US Patent No. 5,982,379) and Loushin et al (Publication No. US 2004/0196480).

Concerning claims 2 and 9, Kuwata et al discloses an apparatus (Figs.1-2, 25) adjusting tonal characteristics of an image to a printer, comprising a storage unit (21, Fig.2) storing a color correction scheme using a color gamma curve (Fig.20) varying in accordance with variable values comprising locations of first and second internal points (lowest point on the left, and highest point on the right) on the color gamma curve and a gamma coefficient; a variable input unit (41, Fig.7 or γ value) receiving the variable values; and a tone adjusting unit (21) adjusting the tonal characteristics of the image by reflecting the variable values in the color correction scheme and outputting image data to the printer (30), (Figs.7-10, 27, 28; Abstract; paragraphs 0089-0091, 0130-0133, 0158-0167, 0196, 0233-0235, 0245, 0248-0249).

Kuwata does not directly teach that the first and second internal point and the gamma coefficient are input from a user via a graphical user interface. The same discussion is repeated as in claim 1 above.

In addition, Kuwata fails to teach that the tone adjusting unit generates bitmap data as a result of the adjustment of the tonal characteristics. Loushin et al discloses a recording method and apparatus for printing an image on a receiver wherein bitmap data as a result of the adjustment of the tonal characteristics of the image are output for printing (Figs.1, 3, 5; Abstract; col. 5, lines 8-26; col. 9, line 63 – col. 10, line 16; col. 11, lines 27-42). It would have been obvious to one skilled in the art at the time the invention was made to combine the above teaching of Loushin et al to the tone adjusting unit in Kuwata et al because both of them teach the same endeavor of an apparatus for adjusting tone characteristic of an image to a printer as claimed.

Concerning claims 10-13, Kuwata et al in view of Suzuki and Loushin et al discloses the apparatus of claim 9, wherein the first internal point is located in a position that is lower and to a left of the second internal point, and the first and second internal points are programmed where the first internal point moves along the color gamma curve from left to right and from bottom to top and the second internal point moves along the color gamma curve from right to left and from top to bottom (Figs. 20, 27), (claim 10); the variable values comprise information of spline correction of the color gamma curve (paragraph 0233), (claim 11); wherein the storage unit stores the color correction scheme programmed as one of a printer driver and firmware of the printer (21b), (claim 12); the variable input unit receives the variable values via one of a graphic user interface of the printer driver and a user interface of the printer (Figs.2, 7), (claim 13).

Conclusion

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Madeleine AV Nguyen whose telephone number is 571 272-7466. The examiner can normally be reached on Monday-Friday 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on 571 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Madeleine AV Nguyen
Primary Examiner
Art Unit 2625

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